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| EXAMINER | |
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| GAY, SONIA L | |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/709,142 | SCHAUSER ET AL. | |
| | Examiner | Art Unit | |
| | SONIA GAY | 2614 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *29 August 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *08/29/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to Amendment submitted on 08/29/2008 in which claims 1- 29 are presented for examination.

***Claim Rejections - 35 USC § 112***

1. Claims 1 -25 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For claims 1 and 29 , the preamble is misdescriptive. The preamble recites "a bandwidth -adaptive method for synchronizing a consumer node representation of a dynamic data set and the source node representation of the dynamic data set." However, the body of the claim does not recite any bandwidth adaptation or any synchronization.

Claims 2 – 13 are rejected for the same reasons discussed above.

Claim 14 has the same defect as claim 1.

Claims 15 – 25 are rejected for the same reasons discussed above.

***Claim Rejections - 35 USC § 103***

2. Claims 1-2 and 5- 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salesky et al. ( US 2005/0080850) in view of Oi et al. ( US 7,233,592).

For claim 1, Salesky et al. discloses a bandwidth-adaptive method ([0141][0142]) for synchronizing a consumer node representation of a dynamic data set, the method comprising :

a) receiving at a communications service (*conference server*, [0054]) from a source node (presenter client : Fig. 1 *12*) metadata ( block-location ID stamp, time-stamp, origin stamp, other ID stamps, metadata in JPEG stream: [0057][0058]) identifying a plurality of data packets (blocks : [0074]) that represent at least a portion of a changing data set at a point in time ([0082])([0059]);

(b) receiving at communications service (*conference server*, [0054]) from the source node at least one of the identified data packets ( blocks: [0059]);

c) selecting at least one of the received data packets responsive to the received metadata (time-stamp: [0058])([0142]);

(d) transmitting from the communications service (*conference server*, [0054]) to a consumer node the metadata ([0059][0142]); and

(e) transmitting from the communications service (*conference server*, [0054]) to the consumer node the selected at least one data packet ([0059][0060][0142]).

Yet, Salesky et al. fails to teach that the metadata is a packet transmitted to and received from the communications service that can identify a plurality of data packets that represent a state of at least a portion of changing data set a point in time.

However, Oi et al. discloses a method wherein the identification portion of the data, metadata, can be separated into a different packet for the purpose of storing identification information for separate, subsequent data packets including the number of subsequent packets and the states of the subsequent packets ( column 5 lines 30 – 50; column 10 lines 30 – 36).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the teachings of Salesky et al. with the teachings of Oi et al. so that the metadata disclosed above in Saleskey et al. can be separated to form a new metadata packet for the storing of information such as identifying the states of the all the transmitted, subsequent data packets or blocks as disclosed above in Salesky et al.

For claims 2, 5-29, the teachings of Salesky et al. and Oi et al. further disclose

receiving a request from the consumer node for a current state of the changing data set (Salesky et al., [0059]).

wherein step (c) comprises selecting a plurality of the received data packets responsive to the received metadata packet (Salesky et al., Fig. 7B and [0142]).

wherein step (d) comprises transmitting to a consumer node each of the selected plurality of data packets (Salesky et al., , Fig. 7B and [0142]; Oi et al., column 10 lines 30 – 36).

receiving at the communications service from the source node at least one of the identified data packets in encrypted form (Salesky et al., [0011][0166]).

storing the received metadata packet ([0058]) in a memory device (Salesky et al., base image frame store : [0133]; delta block generator : [0131]) ([0059]).

storing the received at least one data packet in a memory device (Salesky et al., base image frame store : [0133]; delta block generator : [0131]) ([0059][0131]) .

wherein step ( c) comprises: (c – a) selecting at least one of the received data packets responsive to the received metadata packet (Salesky et al., [0058][0142]; Oi et al., column 10 lines lines 30 -36 ) ; and (c-b) selecting at least one of the stored data packets ( [0131] [0132]) responsive to the received metadata packet (Salesky et al., [0142]; Oi et al., column 10 lines 30 - 36).

wherein step ( e) comprises: (e-a) transmitting to the consumer node the selected at least one of the received data packets ( Salesky et al., [0142]) and (e-b) transmitting to the consumer node the selected at least one of the stored data packets (Salesky et al., [0142]).

storing, in a memory element, metadata information identifying the at least one data packet transmitted to the consumer node (Salesky et al., [0059][0142]).

selecting at least one of the received data packets responsive to the received metadata packet (Salesky et al., [0142]) and the stored information identifying the at least one data packet transmitted to the consumer node (Salesky et al., [0142]) ([0059]).

For claim 14, Salesky et al et al. teaches a bandwidth-adaptive system synchronizing consumer node representations and a source node representation of a changing data set, the system comprising:

a source node (presenter client : Fig. 1 12 ) transmitting at least one metadata packet ( block-location ID stamp, time-stamp, origin stamp, other ID stamps : [0058] ; type of data [0170]; imbedded command messages : [0099]) identifying a plurality of data packets (blocks :

[0059][0128]), each that represent the current state of a changing data set ( [0059][0082]) and transmitting at least one of the identified data packets ([0056][0059][0082]) ; and

a communications service (conference server: Fig. 1 14) in communication with the source node ([0054]), the communications service for selecting on of the at least one data packet for transmission to a first consumer node ([0142]).

Yet, Salesky et al. fails to teach that metadata is a packet can identify a plurality of data packets that represent a state of at least a portion of changing data set a point in time.

However, Oi et al. discloses a method wherein the identification portion of the data, metadata, can be separated into a different packet for the purpose of storing identification information for separate, subsequent data packets including the number of subsequent packets and the states of the subsequent packets ( column 5 lines 30 – 50; column 10 lines 30 – 36).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the teachings of Salesky et al. with the teachings of Oi et al. so that the metadata disclosed above in Saleskey et al. can be separated to form a new metadata packet for the storing of information such as identifying the states of the all the transmitted, subsequent data packets or blocks as disclosed above in Salesky et al.

For claims 15 - 29, Salesky et al. further discloses wherein

the first consumer node, and wherein the first consumer node requests the current state of the changing data set from the communications service (Salesky et al.:, Fig. 1 18 (a) and [0059]).

the consumer service selects one of the at least one metadata packet and the at least one data packet in response to the request made by the first consumer node (Salesky et al., [0059][0142]).

the second consumer node, and wherein the second consumer node requests the current state of the changing data set from the communications service (Salesky et al., Fig. 1 18 (b) and [0059]).

the source node transmits a plurality of metadata packets, each of the plurality of metadata packets representing one state of the changing data set (Salesky et al., [0059][0142]).

the communication service selects a first metadata packet to transmit to the first consumer node and a second metadata packet to transmit to the second consumer node (Salesky et al.: [0135][0136][0137]).

the communications service further comprises a memory element (Salesky et al., base image frame store : [0132] [0133]).

the memory element is a persistent storage device (Salesky et al., base image frame store as local permanent storage : [0149]).

the communications service stores the received at least one metadata packet in the memory element (Salesky et al., [0059][0132][0133]).

the communications service stores the received at least one data packet in the memory element (Salesky et al., [0059][0132][0133]).

the communications service stores in the memory element information regarding transmission of packets to a consumer node (Salesky et al., [0137]).

the source node encrypts the at least one data packet before transmission to the consumer ([0011][0166]).

For claim 26 , Salesky et al. discloses a communications service for synchronizing consumer node representations and source node representations of a changing data set, the service comprising:

a receiving subsystem ( input filters: [0121]) for receiving at least one metadata packet identifying a data packet representing the current state of a changing data set and at least one data packet identified be the received at least one data packet ([0059][0121][0130]);

a synchronization engine for selecting one of the at least one metadata packet and the at least one data packet ([0058][0129][0142]);

a transmission subsystem (output filers : [0121]) for transmitting the selected one of the at least one metadata packet and the selected at least selected one data packet ([0133][0137][0138][0139][0141]).

Yet, Salesky et al. fails to teach that metadata is a packet can identify a plurality of data packets that represent a state of at least a portion of changing data set a point in time.

However, Oi et al. discloses a method wherein the identification portion of the data, metadata, can be separated into a different packet for the purpose of storing identification

information for separate, subsequent data packets including the number of subsequent packets and the states of the subsequent packets ( column 5 lines 30 – 50; column 10 lines 30 – 36).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the teachings of Salesky et al. with the teachings of Oi et al. so that the metadata disclosed above in Saleskey et al. can be separated to form a new metadata packet for the storing of information such as identifying the states of the all the transmitted, subsequent data packets or blocks as disclosed above in Salesky et al.

For claims 27 - 28, Salesky et al. further discloses

comprising a memory element (base image frame store: [0132] [0133]).

wherein the synchronization engine selects one of the at least one metadata packet and the at least one data packet in response to a request received from a consumer node ( [0059][0142]).

For claim 29, Salesky et al. teaches in a system having a source node and a plurality of consumer nodes, a bandwidth-adaptive method for synchronizing a consumer node representation of a dynamic data set and the source node representation of the dynamic data set the method comprising the steps of:

(a) receiving from a source node first metadata (metadata corresponding to changed blocks: [0059]) identifying a first plurality of data packets (previous base blocks : [ 0131]) represent a state of at least a portion of a changing data set at a first point in time ([0082]);

(b) receiving from a source node second metadata (metadata corresponding to changed blocks: [0059]) identifying a second plurality of data packets (base data : [0128][0131]) that represent a state of at least a portion of a changing data set at a second point in time( [0082]).

(c) generating third metadata information (metadata corresponding to changed blocks: [0059]) representing the difference between the first set of identified data packets and the second set of identified data packets ( delta blocks: [0131]) , the third metadata information identifying a third plurality of data packets ( metadata corresponding to delta blocks : [0131]);

(d) transmitting to a consumer node the third metadata information ([0059][0136]); and

(e) transmitting to the consumer node at least one of the identified data packets from the third plurality of data packets ([0136][0142]).

Yet, Salesky et al. fails to teach that metadata is a packet can identify a plurality of data packets that represent a state of at least a portion of changing data set a point in time.

However, Oi et al. discloses a method wherein the identification portion of the data, metadata, can be separated into a different packet for the purpose of storing identification information for separate, subsequent data packets including the number of subsequent packets and the states of the subsequent packets ( column 5 lines 30 – 50; column 10 lines 30 – 36).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the teachings of Salesky et al. with the teachings of Oi et al. so that the metadata disclosed above in Saleskey et al. can be separated to form a new metadata packet for the storing of information such as identifying the states of the all the transmitted, subsequent data packets or blocks as disclosed above in Salesky et al.

3. Claims 3 – 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salesky et al. (US 2005/0080850) in view of Oi e al. (US 7,233,592), and further in view of Teplov et al. (US 7,222,305).

For claim 3, Salesky et al. fails to teach repeating steps (a) and (b) until a request is received from a consumer node for the current state of the changing data set.

However, Teplov et al. discloses a method for synchronizing a consumer node representation of dynamic data set and the source node representation of the dynamic data set (Abstract) further comprising receiving from a source node metadata information identifying a plurality of data packets that represent a state of at least a portion of a changing data set at a point in time and receiving from a source node at last one of the identified packets until receiving a request from a consumer node (client object: column 7 lines 51 – 54) for the current state of the changing data set for the purpose of transmitting the new communication to the consumer node when the consumer node is ready to receive the new data ( column 8 lines 7 – 9; column 14 lines 13 – 25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention disclosed in Salesky et al. with the invention disclosed in Teplov et al. to continuously receive metadata and data packets from the source node as disclosed above in Salesky et al. until the consumer node requests the state of changing data for the purpose of transmitting changing data to the consumer node when the consumer node is ready to receive the new data.

For claim 4, Salesky et al. in view of Teplov et al. discloses the claimed invention above and further discloses wherein step (c) comprises the steps of:

(c-a) selecting one of the received metadata information (time stamp: [0058]); and (c-b) selecting at least one of the received data packets identified by the selected metadata information ( Salesky et al., [0142]).

***Response to Arguments***

4. Applicant's arguments with respect to the objection of claims 3-4,6, 10 – 13, and 18 - 19 have been fully considered and are persuasive. The objection of claims 3-4,6, 10 – 13, and 18 - 19 has been withdrawn.

5. Applicant's arguments with respect to the rejection of claims 1 - 29 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SONIA GAY whose telephone number is (571)270-1951. The examiner can normally be reached on Monday to Thursday from 7:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sonia Gay/
Examiner, Art Unit 2614

December 5, 2008

/Ahmad F Matar/
Supervisory Patent Examiner, Art Unit 2614